

In the Claims

The following listing of claims will replace all prior versions and listing of claims in the application.

1. (Currently Amended) A press pad comprising a fabric that includes a warp and a weft that is each formed of a number of threads that are oriented in respective planes that are generally perpendicular to a plane of the fabric and that are parallel to one another and wherein the planes associated with the warp threads are generally transverse to the planes associated with the weft threads generally throughout the fabric, and wherein one of the warp or weft includes a pattern of alternating types of thread, the pattern repeating itself in the fabric,

wherein the pattern of alternating types of threads includes at least two types of thread of different elasticities transverse to the thread axis, each type of thread comprising a sheath made of an elastomeric material and a core with a higher tensile strength than the sheath, and wherein the core of one of the types of thread is metal based and the core of the other type of thread is polymer-based, and

wherein a diameter of the first type of thread is generally equal to a diameter of the second type of thread such that the diameters of the two types of thread are generally equal.

2. (Previously Presented) The press pad according to claim 1, characterized in that the at least two types of thread have polymer material at least on their lateral surfaces.

3. (Cancelled)

4. (Previously Presented) The press pad according to claim 1, characterized in that the at least two types of thread each are bunched or stranded from fibers.

5. (Cancelled)

6. (Cancelled)

7. (Previously Presented) The press pad according to Claim 1, characterized in that the polymer based core is essentially made of polyamide.

8. (Previously Presented) The press pad according to Claim 1, characterized in that at least one of the cores is essentially bunched or stranded from fibers.

9-10. Cancelled.

11. (Currently Amended) A press pad comprising:

a warp and a weft, at least one of the warp and weft including a pattern of alternating types of threads having differing elasticities transverse to a thread axis, each type of thread including a core and a polymer material at least on its lateral surface, and wherein the core of one of the types of thread is metallic and the core of another type of thread is polymer-based; and

the weft being interwoven with the warp such that threads of the warp extend in a generally linear woven direction and are substantially perpendicular to threads of the weft throughout the fabric, wherein the pattern of alternating types of threads repeats itself in the at least one of the warp and the weft,

wherein a diameter of the first type of thread is generally equal to a diameter of the second type of thread.

12. (Previously Presented) The press pad according to claim 11, wherein at least one weft thread has a sheath made of a polymer material and a core having a higher tensile strength than this sheath.

13. (Previously Presented) The press pad according to claim 12, wherein the metallic core is essentially made of brass.

14. (Previously Presented) The press pad according to claim 12, wherein the polymer-based core is essentially made of polyamide.

15. (Previously Presented) The press pad according to claim 12, wherein the warp has a core that is essentially bunched or stranded from fibers.

16. (Previously Presented) The press pad according to claim 12, characterized in that at least one type of thread is bunched or stranded from fibers.

17. (Previously Presented) The press pad according to claim 12, characterized in that at least one type of thread of the warp includes a sheath made of a polymer material and a core having higher tensile strength than this sheath.

18. (Currently Amended) A press pad with improved pressure compression having:

a warp; and

a weft in communication with the warp such that threads of the weft are substantially aligned along a first axis within a plane of the press pad and threads of the warp are substantially aligned along a second axis that is nearly transverse to the first axis within the plane of the press pad.

wherein at least one of the warp and the weft includes an alternating pattern of at least two types of threads of differing elasticities in the transverse to the thread axis, each type of thread having at 1) a sheath that is an elastomer and has a high temperature stability above 200 degrees Celsius, and 2) a core, wherein the core of each type of thread all has a higher tensile strength than the sheath, and wherein one of the types of thread has a core that is metal based and another type of thread has a core that is polymer-based, and

wherein the diameters of all of the types of thread in the alternating pattern are generally equal.

19. (Previously Presented) The press pad according to claim 18, wherein the polymer-based core is essentially made of polyamide.

20. (Previously Presented) The press pad according to claim 18, wherein at least one core is essentially bunched or stranded from fibers.

21. (Previously Presented) The press pad of claim 1 wherein the diameters of the types of thread are generally equal for generating a padding effect and a generally homogenous pressure distribution over an area of the press pad.

22. (Previously Presented) The press pad of claim 21 incorporated into a pressing machine constructed to apply a coating of a wear resistant melamine resin overlay to a material and wherein the press pad is constructed to prevent graying of the wear resistant melamine resin.

23. (Previously Presented) The press pad of claim 11 wherein the diameters of the types of thread are generally equal for preventing graying of a wear resistant melamine resin overlay applied to a material processed proximate the press pad and generally equalizing different pressures across an area of the material.

24. (Previously Presented) The press pad of claim 18 wherein the diameters of all of the types of thread are generally equal for:

(a) generating a padding effect and a generally homogenous pressure distribution over an area of the press pad; and

(b) preventing graying of a wear resistant melamine resin overlay applied to a material processed proximate the press pad and uniformly distributing the homogenous pressure distribution across an area of the wear resistant melamine.